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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,225	07/03/2003	Wei-Chiang Lin	14506-44089	5104

7590 08/08/2006

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Atlanta, GA 30326

EXAMINER

KISH, JAMES M

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/613,225

Applicant(s)

LIN ET AL.

Examiner

James Kish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/14/05, 3/28/06</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 9-12, 14-17, 20-21, 23-26, 28, 31-36, 38-41 and 44-45 rejected under 35 U.S.C. 102(b) as being anticipated by Alfano et al. (US Patent No. 4,930,516). Alfano discloses a method and apparatus for detecting the presence of cancerous tissue using visible luminescence. By determining the wavelength(s) at which maximum intensity(ies) are attained for the tissue in question and by comparing these peak wavelengths, either visually or electronically, to the peak wavelength(s) from a known non-cancerous tissue one can determine the carcinomatoid status of the tissue in question (see Abstract). The invention provides an in-vivo spectroscopy diagnosis technique using an optical fiber to determine cancer inside the body (i.e. brain) (column 4, lines 20-49). The light source may comprise a laser (column 7, lines 13-14), which is then fed into a fiber optic probe (column 7, line 22). The wavelength of the laser source is between 350 and 500 nm (column 7, line 47). As can be seen from Figures 2a-b and Figures 4a-b, where the figures labeled (a) are those corresponding to cancerous regions, there are at least two peaks at different wavelengths.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Modell et al. (US Patent No. 6,826,422). Modell discloses methods and apparatus for determining a characteristic of a sample of a material by the interaction of electromagnetic radiation with the sample (see Abstract). If the sample is in vivo, it may be adjacent to other tissues of like or different kinds and may represent an area of abnormality within a tissue, or the sample may represent an entire tissue (column 8, lines 51-59). The system comprises an optical probe (column 11, line 33) with a transmission means for transmitting light from a light source and a means for collecting reflected light, which is then transmitted to a detector for further analysis (column 9, lines 24-35). Also see column 14, lines 35-43. One possible light source is a laser source having a wavelength in the ultraviolet part of the electromagnetic spectrum, such as 337 nm (column 27, lines 9-14). In one embodiment of the invention, the system would only register the signals  $I_{ij}$  (response intensities at a specific wavelength,  $I$ , for a specific volume element,  $j$ ) (column 29, lines 38-48). The specific wavelength,  $i$ , could be set to any desirable value, including 460 nm or 500 nm. A computer may provide the ability to compare a first data set with a second data set obtained from the same volume

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element or different volume elements (column 29, lines 54-60). Also see column 30, lines 12-30, as well as column 31, lines 8-40.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Kish whose telephone number is 571-272-5554. The examiner can normally be reached on 8:30 - 5:00 ~ Mon. - Fri..

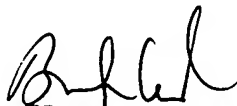
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

- Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK

  
**BRIAN L. CASLER**  
**SUPERVISORY EXAMINER**  
**TECHNOLOGY CENTER 3700**